

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-524

Relating to Exemptions under  
Section 27156 of the Vehicle Code

Fuel Tech. Ionix, Inc.  
Super Fuel Ionizer

WHEREAS, Vehicle Code Section 27156 and Title 13, California Code of Regulations (CCR) Section 2222(e) authorize the California Air Resources Board (ARB) and its Executive Officer to exempt add-on and modified parts from the prohibitions of Vehicle Code Section 27156;

WHEREAS, Fuel Tech. Ionix, Inc. has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for the Super Fuel Ionizer for use on 2002 and older model-year heavy-duty diesel vehicles;

WHEREAS, pursuant to the authority vested in the Executive Officer by the Health and Safety Code Section 39515 and in the Chief, Mobile Source Operations Division by the Health and Safety Code Section 39516 and Executive Order G-45-9, the ARB finds that;

1. The Super Fuel Ionizer is an add-on device that is attached to the fuel line in a motor vehicle.
2. The fuel line is part of the required motor vehicle pollution control system.
3. The Super Fuel Ionizer is intended for use with a required motor vehicle pollution control system.
4. The Super Fuel Ionizer by being installed on the fuel line alters the original design of a motor vehicle pollution control system.
5. The Super Fuel Ionizer is a device subject to the prohibitions of Vehicle Code Section 27156 and an add-on part as defined by 13 CCR Section 1900(b)(1).
6. The Super Fuel Ionizer does not reduce the effectiveness of any required motor vehicle pollution control system.
7. The ARB, in the exercise of technical judgement, is aware of no basis on which the Super Fuel Ionizer will provide either a decrease in emissions or an increase in fuel economy.
8. It has not been determined what effect the use of the Super Fuel Ionizer may have on any warranty, either expressed or implied, by the manufacturer of a motor vehicle on which the device is installed.

9. The Super Fuel Ionizer is not a certified motor vehicle pollution control device pursuant to the Health and Safety Code Section 43644.
10. The ARB by granting an exemption to Fuel Tech. Ionix, Inc. for the Super Fuel Ionizer does not recommend or endorse in any way the Super Fuel Ionizer for emission reduction, fuel economy, or any other purpose.

IT IS HEREBY RESOLVED that the Super Fuel Ionizer is exempt from the prohibitions of Vehicle Code Section 27156 for installation on 2002 and older model-year heavy-duty diesel vehicles subject to the following conditions:

1. This exemption shall not apply to any device, apparatus, or mechanism advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.
2. No changes are permitted to the device as described in the application for exemption. Any changes to the device, applicable model-year, or other factors addressed in this Executive Order must be evaluated and approved by the ARB prior to marketing in California.
3. Marketing of this device using an identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in the Executive Order shall be prohibited unless prior approval is obtained from the ARB. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any component of the product as an individual device.
4. Any oral or written references to this Executive Order or its content by Fuel Tech. Ionix, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emissions reduction or fuel economy claims for the Super Fuel Ionizer and is only a finding that the device is exempt from the prohibitions of Vehicle Code Section 27156.
5. No claim of any kind, such as "Approved by the ARB," may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten-day written notice of intention to revoke the Executive Order, in which period the holder of the Executive Order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request, and the Executive

Order may not be revoked until a determination is made after a hearing that grounds for revocation exist.

Executed at El Monte, California, this 25<sup>th</sup> day of September 2001.

A handwritten signature in black ink, appearing to read "R. B. Summerfield", written in a cursive style.

R. B. Summerfield, Chief  
Mobile Source Operations Division

## EVALUATION SUMMARY

Manufacturer Name: Fuel Tech. Ionix, Inc.

Name of Device: Super Fuel Ionizer

Background:

Fuel Tech. Ionix, Inc. (FTI) of 1749 N. Vulcan Avenue #14, Encinitas, California 92024 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for its Super Fuel Ionizer. The exemption application includes all 2002 and older model-year heavy-duty diesel vehicles.

Recommendation:

Grant exemption to FTI as requested and issue Executive Order D-524.

Device Description:

FTI's Super Fuel Ionizer is an in-line fuel device designed to enhance combustion by increasing fuel atomization. According to FTI, the Super Fuel Ionizer promotes ionization of fuel droplets as the fuel passes over the dissimilar metals in the device. The ionized, or electrically charged, fuel droplets repel each other and break into smaller droplets resulting in improved atomization and combustion. The device consists of an aluminum housing, a magnet in the center of the cylinder, and stainless steel, copper, and zinc beads. The device measures 2 inches in diameter and 2.5 inches in length. It is installed between the fuel filter and the pump. Use of the device does not require any other alterations to the vehicle emission control system.

Discussion/Basis for the Recommendation:

Exemption of FTI's Super Fuel Ionizer is based on engineering evaluation of the emissions impact. The Air Resources Board did not conduct any testing to confirm FTI's claims. However, based on evaluation of the operating principles of the Super Fuel Ionizer and on previous evaluations of similar devices, the staff determined that the Super Fuel Ionizer will not have any adverse effect on vehicle emissions. Therefore, the staff concludes that FTI's Super Fuel Ionizer meets the requirements for a VC 27156 exemption for 2002 and older model-year heavy-duty diesel vehicles.